REMARKS

Claims 1, 2, 14 and 19 are amended to further characterize the invention. Claims 6-9, 17 and 21 are amended to correct dependency or to correct typographical error. Claims 3-5, 20 and 22-58 are cancelled without disclaimer of or prejudice to the inventions disclosed. The amendments are supported by the application as originally filed and no new matter is added.

Claims 1-23 are rejected under 35 U.S.C. §103(a) as being unpatentable over Wittenbrink et al. (WO 97/147769). Applicants traverse the rejection to the extent that it can be maintained.

Applicants claim a middle distillate cut having particular ratios of iso-paraffins to n-paraffins for different fractions of the middle distillate cut. The middle distillate cut is more than 50 mass % paraffins lighter than C_{16} and in which more than 50 mass % of the total paraffins of the middle distillate cut are iso-paraffins. The distribution of iso:n paraffin ratios in the claims provides a gradient of iso:n ratios as shown, for example, in tables A and B and accompanying graph. The claimed middle distillate cut having the recited iso:n paraffin properties unexpectedly has improved Cetane number and cold flow properties.

In sharp contrast, Wittenbrink et al. fail to teach or suggest iso:n paraffin ratios for different carbon number ranges, i.e. C_8 to C_9, C_{10} to C_{18} and C_{19} to C_{24}. Also, Wittenbrink et al. fail to teach or suggest any advantages from diesel fuel having the claimed composition comprising the recited ratios. Wittenbrink et al. disclose a generic diesel material at page 5 that is presented to illustrate the level of oxygenates in material recovered from a fractionator 13 (pages 5-6). Wittenbrink et al. discuss the effect of different FT catalysts on the distillate boiling range (page 6, paragraphs 3-5). However, there is no teaching regarding particular mass ratios or ranges of ratios for different hydrocarbon fractions. Wittenbrink et al. mention in example 7 the preparation of an external standard for GC/MS analysis that includes a mixture of primary alcohols in the C_2 to C_{18} range and n-paraffins in the C_8 to C_{16} range. The example is intended to compare the effectiveness of different treatments of diesel fuel to remove oxygenates, deoxygenates and alcohols. There is nothing in the example that teaches or suggests the claimed mass ratios.

The Office Action states that it would be obvious to a person of ordinary skill to have modified the process of Wittenbrink et al. to obtain a distillate comprising paraffins lighter than C_{16} because it is within the skill in the art to separate a product into different cuts to meet certain characteristics. Applicants are claiming a composition and not a process. While separating

distillate fractions may be known in the refining art, there must be some specific understanding that would motivate the skilled artisan to select the particular cut (composition) that is claimed. *In re Kotzab*, 217 F.3d 1365 (Fed. Cir. 2000), MPEP 2143.01. Applicants respectfully submit that Wittenbrink et al. fails to disclose the claimed composition or the improvements in Cetane number and CFPP that results from the claimed composition. Therefore, Wittenbrink et al. fail to motivate a person of ordinary skill to select a distillate cut that might include the claimed composition.

Applicants respectfully submit that the middle distillate cut of claim 1 is allowable in view of Wittenbrink et al. and request that the rejection be withdrawn. As claims 2, 6-19 and 21 depend directly or indirectly on claim 1, these claims are likewise allowable.

In view of the above amendments and remarks, Applicant respectfully requests a Notice of Allowance. If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.

Respectfully submitted,

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Date: 7 April 2006

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